

## **REMARKS**

Claims 19-35 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

### **REJECTION UNDER 35 U.S.C. § 102**

Claims 19, 24-27 and 30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Lamprecht (U.S. Pat. No. 5,875,018).

Claims 19, 31 as well as 34 to 36 require that the sensor device detects pitching, yawing, and rolling movements of at least one eye of the user. The various types of eye movements are illustrated in Figure 2 of the present application and further explained in detail in paragraph [0018] of the present application. According to paragraph [0018] the pitching movements 22 are performed around an essentially horizontal transverse axis 23 and the yawing 24 around a vertical transverse axis 25. Thus, the pitching movement 22 and the yawing movement 24 change the line of sight. The rolling movements 26, however, are performed around a longitudinal axis 27, the longitudinal axis 27 being perpendicular to the surface of the eyeball 19 leading through the center of the pupil 21. Thus, the rolling movement is nothing else than a rotation of the eyeball 19 around the center of the pupil 21. In consequence, claim 19, 30 and 34 to 36 require that the sensor device detects not only changes of the line of sight but also the rotation of the eyeball 19 around a longitudinal axis that is perpendicular to the surface of the eyeball and leads through the center of the pupil. In praxis this rotation can be detected

by a rotation of the iris. The applicant respectfully submits that a detection of the rolling movement is not disclosed in Lamprecht.

Lamprecht discloses a process and a device for cross-eyed persons, who suffer from a deviation of the angular position of the optical axis of one eye from the optical axis of the other eye. To avoid the confusion due to the different images seen by the two eyes, the brain tends to suppress the visual perceptions of one eye. In the long run, the image that receives most of the intention dominates while the other image is suppressed, resulting in a vision dimness (cf. Lamprecht, column 1, lines 8 to 45). According to the process disclosed in Lamprecht, one of the eyes is selected as the leading eye and the position of the optical axis of the leading eye is determined. Furthermore, an image is projected before the none-leading eye. The projected image is identical with the image that would be received by the none-leading eye in an angular position identical with the position of the leading eye's optical axis. Thus, the process allows a cross-eyed person to see stereoscopically.

In column 4, lines 50 to 67, the device according to Lamprecht is described in more detail. The device according to Lamprecht comprises two CCD cameras 1, 2 mounted on a helmet which can be placed on the head of the cross-eyed person. The CCD cameras 1, 2 are connected to an evaluation device 3 which supplies information on the angular position of the optical axis of the eyes to an image producing device 4 (cf. Lamprecht, column 4, lines 51 to 58). Thus, the CCD cameras 1, 2 and the elevation device 3 is only arranged for determining the orientation of the optical axis but not the rotation of the eyeballs around the optical axis. In consequence, the CCD cameras 1, 2 and the evaluation device 3 do not detect a rolling motion as claimed in claims 19, 30

and 34 to 36. The disclosure in an asserted reference, such as Lamprecht, must provide an enabling disclosure of the desired subject matter and, if not, such reference does not constitute prior art. *Elan Phar. Inc. v. Mayo Fouundation for Medical Education & Research*, 346 F.3d 1051 (Fed. Cir. 2003). See also, MPEP 2121.01. In this case, Lamprecht fails to provide an enabling disclosure for detecting a rolling motion as recited in applicant's claimed invention. For at least this reason, it is respectfully submitted that the pending claims define patentable subject matter over Lamprecht.

The device according to Lamprecht is further provided with two cameras 5, 6 which are also mounted on the helmet and which are connected to the image producing device 4. By means of adjustment devices 7, 8, the cameras 5, 6 can be swivelled according to any change in the angular vision of the leading eye (cf. Lamprecht, column 4, lines 59 to 67). Since the CCD cameras 1, 2 and the evaluation device 3 are only arranged for determining the orientation of the optical axis of the eyes, the term "according to any change in the angle of vision" can only be understood as "according to any change in the angular position of the optical axis", since the motion of the cameras 5, 6 cannot comprise a component that is not detected by the CCD cameras 1, 2 and the evaluation device 3. The images that are generated by the cameras 1, 2 are finally supplied to projection devices 9, 10, so that the none-leading eye can perceive an image that would be perceived by the none-leading eye if the position of its optical axis were identical with the position of the optical axis of the leading eye.

Lamprecht et al does not disclose the detection of the rotation around the optical axis around the leading eye. There is also no basis for the assumption that the rolling

movement might be detected since only the orientation of the optical axis must be detected for compensating the visual impairment of a cross-eyed person. As pointed out in paragraph [0019] of the present application, the detection of the rolling movement is essential for the functionality of the subject matter of the independent claims 19, 30 and 34 to 36. Due to the vestibulo-ocular reflex, the eyes always rotate against the head movement, so that the image of the surroundings on the retina is stationary. If the complete movement of the eyes, including rolling movements, are detected and if a camera mounted on the head is moved in line with the movements of the tracked eye, the images that are taken by the camera can be kept stationary.

To the best of applicant's knowledge, all documents that deal with the problems associated with head based cameras detect and analyze exclusively the angular position of the optical axis of the eyes as Lamprecht has done. Moreover, the art fails to show tracking the full motion of the eyeball for stabilizing a head mounted camera. For at least these reasons, it is respectfully submitted that the pending claims defines patentable subject matter over Lamprecht. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

## **CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office

Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: December 4, 2009

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